

## **BURNER FOR SYNTHESIS GAS**

5

### **Abstract**

The present invention relates to a burner, substantially comprising a swirl generator for a combustion air stream and means for introducing fuel into the combustion air stream, the swirl generator having combustion-air inlet openings for the combustion air stream that enters the burner, and the means for introducing fuel into the combustion air stream comprising one or more first fuel feeds having a group of first fuel outlet openings, arranged distributed around the burner axis at a combustion chamber-side end of the burner. The burner is distinguished by the fact that the one or more first fuel feeds having the group of first fuel outlet openings are mechanically decoupled from the swirl generator. The present burner allows reliable and safe use of synthesis gas in both dilute and undiluted form as fuel.

10

15